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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,615	07/30/2003	Lee R. Klose	87354.3200	6120

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EXAMINER

LEVITAN, DMITRY

ART UNIT	PAPER NUMBER
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2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/629,615

Applicant(s)

KLOSE ET AL.

Examiner

Dmitry Levitan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-21 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1-22 of U.S. Patent No. 6,928,349. Although the conflicting claims are not identical, they are not patentably distinct from each other, as both are directed to protocol monitoring and conversion, because data communication of current application is known to comprise a number of pieces of information, as claimed in US 6,928,349.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 5, 6, 8, 11, 12, 14 and 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8, 11 and 20 limitations, directed to “a group consisting of J1850, ..., ISO15765, other protocols and a combination thereof” are unclear because claim limitations directed to “other protocols” contradicts limitations “a group consisting of”, therefore it is not understood if the group comprises or consists of the listed protocols.

In addition, the limitations of claims 8, 11 and 20 are directed to “a combination thereof” are unclear because it is not understood what is combination of protocols means in the context of the claim: a protocol comprising elements of other protocols or a pair of the protocols bridged in the adapter.

Claims 5 and 17 limitations, directed to “a group consisting of EEPROM,...RAM, other protocols and a combination thereof” are unclear because claim limitations directed to “other memory devices” contradicts limitations “a group consisting of”, therefore it is not understood if the group comprises or consists of the listed devices.

In addition, the limitations of claims 8, 11 and 20 are directed to “a combination thereof” are unclear because it is not understood what is combination of devices means in the context of the claim.

Claim 6 limitations, directed to “other communication protocols” are unclear, because the protocols of parent claim 1 comprise the protocol of vehicle and the protocol of the scan tool, therefore it is not understood what are the other protocols in the context of claim 6.

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Claim 12 limitations, directed to "the communication protocol" in line 2, are unclear because it is not understood if the limitations are directed to the first or the second protocol of parent claim 9.

Claim 12 limitations, directed to "the communication protocol travels on the at least one data line" are unclear, because it is not understood how a protocol can travel on data line, as protocol is not data or message, which can travel.

Claim 14 recites the limitation "the direction" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 limitations, directed to "means for switching to direct the direction of the communication that is controlled by the means for controlling", are unclear, because it is not understood what is controlled by the means for controlling: means for switching or the direction of the communication.

Claim 18 limitations, directed to "communication between the first and second means for interfacing is directed to the means for controlling", are unclear as written.

Claim 19 is rejected as the claim dependent on claim 14.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 8, 13, 15 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Knight (US 2003/0163587).

7. Regarding claims 1, 13 and 15, Knight teaches a data communication adapter and method (Adapter 200, shown on Fig. 1A and 2, [0108], comprising:

a first interface to connect with a scan tool (interface 202 or interface 218 of adapter 200 to connect the adapter to USB host 110, as shown on Fig. 1A and 2, which can be stationary service equipment or portable service tool for vehicle diagnostic[0116]-[0117]);

a second interface to connect with a third interface that is on a vehicle (interface 214 or 216 of the adapter, as shown on Fig. 1A and 2, and disclosed on [0129]-[0132]) to interconnect adapter 200 to the inherent third interface of the vehicle communication network 108, as shown on Fig. 1A and designed according to industry standards [0114], because the third interface is essential to connect network 108 to the adapter 200);

at least one data line that relays data transmitted in a communication protocol between the first and second interfaces (data lines, connecting interface 214 or interface 216 to the adapter CPU 204, as shown on Fig. 2);

a chipset in communication with the at least one data line, the chipset can convert a first communication protocol to a second communication protocol and vice versa (CPU 204, RAM 220, ROM 222 and interface logic 206, connected to the data line, as disclosed above, to provide by-directional conversion between protocols [0116], as shown in examples [0129]-[0133]); and

a transceiver in communication with the chipset and the at least one data line, the transceiver receives and transmits data to and from the chipset (transceiver 214 or 216, as shown on Fig. 2 and [0129]-[0132]).

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8. Regarding claims 8 and 20 (as best understood), Knight teaches translating data between protocols CAN, J1939, J1587, 9141, as shown on Fig. 2 and [0003]-[0006].

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2, 5, 9-11, 14, 16, 17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knight.
11. Regarding claims 2, 9, 14 (as best understood) and 21, Knight substantially teaches the limitations of the claims (see claims 1 and 13 rejection above).

In addition, Knight teaches directing where the data for communication protocol translation will go in the adapter by selecting appropriate interfaces, according to the vehicle communication network standard and the standard utilized by the service tool, as shown on Fig. 2 and [0113]-[0118] and the adapter interfaces are monitoring outside connections for data, because it is essential for the system operation, as monitoring the connections is essential for the system to receive data.

In addition, Knight teaches adapter 200 to comprise a power supply circuit/voltage regulator to provide 3.3 V and 5 V power [0137].

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Knight does not teach using a switch located on the communication line and a chipset to control it.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using switches located on the communication lines, controlled by the chipset to the system of Knight to improve the system operation by disconnecting the unused interfaces data lines, connected to the CPU, by opening the switches, as only one interface at a time, for example 214 or 216, is active in the system and therefore connected to the CPU by a closed switch. The switches will improve the chip set operation in the noisy environment by disconnecting the unused transceivers and reducing possibility of false signal detection on unused CAN or SERIAL 1 ports of the CPU 204, also the chip set knows the active adapter interfaces, so the chipset should control the switches.

12. Regarding claim 11 (as best understood), Knight teaches translating data between protocols CAN, J1939, J1587, 9141, as shown on Fig. 2 and [0003]-[0006].

13. Regarding claims 10 and 16, Knight teaches adapter as a CAN adapter, as the adapter comprises CAN transceiver 214, as shown on Fig. 2.

14. Regarding claims 5 and 17 (as best understood), Knight teaches CPU 204, comprising ROM, flash EPROM, EEPROM and other ROM and RAM memory devices, as shown on Fig. 2 and [0134]-[0135].

15. Claims 3, 4, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knight in view of McClure (US 7,152,133).

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Knight substantially teaches the limitations of the claims (see parent claims rejection above) including the adapter comprising CPU means to convert to/from CAN and J1850 protocols [0003-[0006].

Knight does not teach to convert data between CAN and J1850 standards.

McClure teaches conversion between any protocols in use 2:43-50.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add converting data between CAN and J1850 protocols of McClure to the CPU of the system of Knight to improve the system compatibility with the existing "custom" made service tools, as disclosed by Knight [0005], by converting a data from a vehicle utilizing CAN (or J1850) standard to the service tool utilizing only J1850 (or CAN) standard.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


DMITRY LEVITAN
PRIMARY EXAMINER

Dmitry Levitan
Primary Examiner
Art Unit 2616